

APRIL 2025

Australian Guidelines for Assessment and Diagnosis of Fetal Alcohol Spectrum Disorder

DISSEMINATION, IMPLEMENTATION AND EVALUATION
REPORT

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1. Background

This report outlines the dissemination, implementation, and evaluation of the *Australian Guidelines for the Assessment and Diagnosis of Fetal Alcohol Spectrum Disorder (FASD)*. The primary objective of these guidelines is to support practitioners in undertaking assessments across the lifespan where one possible outcome may be a diagnosis of FASD. This report provides detailed information in accordance with the *Procedures and Requirements for Meeting the NHMRC Standards for Clinical Practice Guidelines* (NHMRC, 2022).

2. Dissemination of the clinical practice guidelines

Following publication, the guidelines it is essential to will be disseminate the guidelines to all potential stakeholders involved in the assessment and diagnosis of FASD. Effective dissemination will be crucial to ensure widespread awareness and adoption of the guidelines. The support and active participation of the Project Steering Committee, Project Advisory Groups, and Guidelines Development Group will be critical in this process. These groups will help facilitate the distribution of the guidelines through various channels, such as professional networks, online platforms and training sessions and workshops.

2.1 Target audience

The primary target users of these guidelines are Australian practitioners undertaking assessments of infants, children, adolescents, and adults that may result in an FASD diagnosis.

Secondary users of these guidelines may include:

- Individuals who have challenges that may be explained by a diagnosis of FASD who are wanting to understand the assessment process.
- Family members/support networks of those with suspected FASD who are wanting to understand the assessment process.
- Health, education, child protection, disability and justice/police professionals who work with individuals presenting with challenges that may be explained by a diagnosis of FASD and are wanting to understand the assessment process and ensure appropriate supports are provided.
- Government and non-government service providers who are wanting to understand how to develop referral pathways to assessment and/or treatment/support services within their organisations.
- Training providers, including tertiary institutions and health professional associations to inform professional development and educational materials and resources to enhance the capability of their profession to work with FASD in Australia.
- National and international researchers may use the results of the evidence review and identified research gaps to inform directions for future research.
- Policy makers across health, education, child protection, disability and justice/police settings could align their practices and procedures to support best practice service provision and resource allocation for individuals with suspected or confirmed FASD.

2.1 Companion documents

The following resources will accompany the main guidelines document:

- Brief guidelines document
- Summary of actionable statements
- Summary of assessment principles and diagnostic criteria
- Practitioner templates (also included as Appendices in the main guidelines document).
- Plain English Overview

- Indigenous Framework
- Frequently asked questions.
- Administrative and Technical Report
- Individual reports for each of the systematic and scoping reviews (x4 documents)

2.3 Dissemination plan

Dissemination of the guidelines will be undertaken via the following strategies:

- Plan for an official launch of the guidelines following NHMRC approval.
- Circulation of final version to all members of the Project Steering Committee, Advisory Groups and Guidelines Development Group and requests for members to circulate widely amongst their professional networks.
- Plan for online publication of the guidelines across multiple websites.
- Circulation of the final versions to all relevant professional associations.
- Distribution via the FASD Australia Hub website and newsletter.
- Distribution via the NOFASD newsletter.
- Publication of a content summary within relevant peer-reviewed journals.
- Distribution to all relevant state-based government and non-government agencies (e.g., child protection, justice).
- Distribution to all Australian universities and encouragement to include information regarding the guidelines in their relevant curricula.
- Presentation at relevant state and national conferences.
- Plan for a series of online and face-to-face workshops.

3. Implementation of the clinical practice guidelines

Organisations are encouraged to identify the local barriers and facilitators to implementation of the guidelines and develop tailored implementation strategies. Research shows that structured implementation strategies tailored to specific settings and target groups are the most effective (Fischer et al., 2016). The information provided in this section and Guidelines Determinants Questionnaire could be used to support organisations and practitioners in developing local implementation strategies.

3.1 Framework of guideline implementability

Gagliardi and colleagues (2011) developed a framework to assist with making guidelines more implementable, by modifying their content and format. We have utilised this framework throughout the development process and described the domains and how this framework has been applied in the current guidelines in Table 1.

Table 1. Application of Gagliardi et al. (2011) Framework of Guideline Implementability

Domain	Definition	Element	Application
Adaptability	The guideline is available in a variety of versions for different users or purposes.	Sources	Internet, peer reviewed journal
		Versions	Full text summary, recommendations summary, 1 page summary, print, digital
		Users	Consumer summary, discipline specific summaries, context specific summaries
Useability		Navigation	Table of contents, online links

	Content is organised to enhance the ease with which the guideline can be used.	Evidence	Narrative and tabulated
		Recommendations	Narrative, recommendations summary, graphic
Validity	Evidence is summarised and presented such that its quantity and quality are apparent	Number of references	Total number of references
		Evidence graded	GRADE-based recommendations provided where appropriate.
		Number of recommendations	Total number of distinct recommendations
Applicability	Information is provided to help interpret and apply guidelines for individual patients.	Clinical considerations	Text boxes, key information summarised in tables, good-practice statements, implementation tips and resources highlighted, additional toolkit to support culturally responsive assessment
Communicability	Resources for providers or patients to inform, educate, support, and involve patients	Inform, educate, support	Clinician templates provided as Appendix.
		Decision making	Diagnostic formulation resource provided as an Appendix
Relevance	The focus or purpose of the guideline is explicitly stated	Objective	Explicitly stated purpose of the guidelines at the outset.
		Stakeholders	Clearly specified who will use the guidelines.
		Needs	Completed an initial stakeholder priority setting survey and embedded feedback throughout the guidelines.
Accommodation	Anticipated changes, resources and competencies required to adapt and accommodate guideline utilization are identified.	Technical	Provided specific implementation considerations, tools, and tips throughout the document.
		Regulator	Described relevant industry standards and engaged clinicians to seek discipline specific supervision.
		Human resources	Actionable statements provided regarding human resources required and specific suggestions for how accommodations can be made.
		Professional	Education, training, or competencies needed by clinicians to deliver recommendations.
		Workflow	Actionable statements provided with suggestions about different approaches to assessment that could be considered.
		Costs	Consideration given to costs associated with assessments and good practice statements and specific content provided to support different approaches to assessment.
Implementation	Processes for planning and applying local strategies to promote guideline utilization are described.	Identify barriers	Individual, organisational or system barriers that could challenge adoption or instructions for local needs of guideline users collected through: <ul style="list-style-type: none"> • Advisory Group meetings • Clinician Determinants Questionnaire

		Tailor guidelines	Information embedded to support culturally responsive practice and additional clinician toolkit.
		Integrated tools	Point-of-care templates/forms to support integration guidelines with care delivery.
		Promote utilization	Develop a detailed dissemination plan with support of the Project Advisory Groups.
Evaluation	Processes for evaluating guideline implementation and utilization are described	Implementation	Pre-post-assessment clinician determinants questionnaire.
		Utilization	Audit Tools –developing a data collection tool for clinics to use to track all assessment outcomes in a consistent way across clinics. Will also support monitoring and evaluation of implementation.

3.1 Summary of key good practice statements

A summary of key good practice statements most likely to lead to improvements in health outcomes have been highlighted.

Prenatal alcohol exposure assessment

Good Practice Statement 5

To support accurate assessment of risk, assess prenatal alcohol exposure both before and after pregnancy recognition. Standardised screening tools, such as the AUDIT-C, are recommended to assess alcohol intake.

- This good practice statement has been highlighted as it represents a significant change from the previous 2016 Guide. The earlier guide assessed prenatal alcohol exposure (PAE) across the entire pregnancy, without distinguishing between these different time points. This update is crucial because alcohol consumption patterns can vary significantly before pregnancy recognition, potentially increasing the level of risk. Therefore, assessing PAE at these specific timepoints is likely to enhance the accuracy of the assessment.

Good Practice Statement 11

Sometimes there may be inconsistencies in the available information about prenatal alcohol exposure. In instances where information is collected directly from the pregnant individual during an assessment, this information should be prioritised over other sources. Practitioners can document inconsistencies in information and indicate that re-assessment may be considered should additional information arise.

- This good practice statement has been emphasised because it addresses an area not covered in the previous 2016 Guide. The Advisory Groups recommended including considerations for situations where there is inconsistent information about PAE history, as this was identified as a challenging area for practitioners to navigate in practice.

Medical assessment

Good Practice Statement 12

Practitioners should consider the appropriateness of all aspects of a medical assessment for the individual and their family, and ideally collaborate with individuals and families to make decisions about what the assessment will involve.

- This good practice statement has been highlighted to support practitioners in navigating the limitations of the current tools and norms available for components of the medical assessment in

Australia. Concerns were raised by all Advisory Groups regarding the ongoing lack of local tools and norms for assessing facial features. Shared decision-making is a foundational aspect of these guidelines, and this good practice statement underscores the importance of this approach, particularly given the limitations of the current norms and tools.

Good Practice Statement 18	Consider other syndromes, genetic conditions, or teratogenic disorders in which dysmorphic features and/or neurodevelopmental impairment can also be present. If unsure, refer to a clinical geneticist for review.
Good Practice Statement 19	With informed consent and assent, as clinically appropriate and in line with local health service guidelines, request chromosome microarray (CMA) and DNA test for fragile X syndrome (FXS). These tests can be done using blood or buccal swabs. Refer to a local genetic health service for guidance if abnormalities are reported.
Good Practice Statement 20	Medical professionals should complete and request additional tests as clinically indicated to identify and monitor current physical health (e.g., cardiovascular-kidney-metabolic health), and exclude other potential impacts on functioning, such as thyroid tests, vitamin B12, iron studies and imaging.

- These three good practice statements have been included to emphasise the importance of considering other conditions and exposures in the assessment. These statements support the implementation of Criterion E of the diagnostic criteria, ensuring a comprehensive assessment that considers various factors that could influence diagnosis.

Holistic developmental, functional and wellbeing assessment

Good Practice Statement 28	Each person attending for assessment should have a plan tailored to their specific developmental needs. This plan should consider current concerns, developmental age, history, past assessments, and other source documents (e.g., available medical and school records), ability to engage in an assessment, assessment adaptations, including interpreters, and any other relevant cultural and social factors. Assessment should include hearing and vision tests if these have not been done before.
Good Practice Statement 31	While it can be helpful to do a comprehensive assessment to understand developmental challenges, sometimes it may not be possible or appropriate. Practitioners should decide the neurodevelopmental domains to prioritise based on functioning, and how much assessment is necessary to determine whether there are clinically significant impairments, and whether they meet criteria for diagnosis.

- These two good practice statements have been highlighted to emphasise the importance of practitioners adopting a 'whole person' individualised approach to the assessment, tailored to the specific needs of each individual. This approach ensures that assessments are person-centred and responsive to the unique circumstances of each individual. The inclusion of these statements and related content in the guidelines is based on feedback from the Clinical Advisory Groups, which noted that the previous Guide was sometimes too rigidly applied, without sufficient consideration of the individual client needs.

Good Practice Statement 29	There are no standardised tools specific for the diagnosis of FASD. Where appropriate, practitioners should use discipline specific standardised tools relevant to the
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neurodevelopmental domain being assessed. Practitioners need to apply their discipline specific knowledge, professional expertise, and clinical judgement to determine the most appropriate approaches for examining the individual within the context of the assessment. Allied health practitioners have specialist knowledge and skills to assess the neurodevelopmental domains. If unsure, practitioners should seek clinical supervision.

- This good practice statement has been highlighted as it represents a change from the previous 2016 Guide. The Guidelines Development Group considered providing a list of standardised tests. However, feedback from the Advisory Groups, indicated that the previous list of example tools led to several unintended adverse consequences. For instance, there was inappropriate use of certain tools in specific population groups, including First Nations Australians. Additionally, it was reported that some clinicians interpreted the guide to mean that if they did not have access to the listed tools, they could not assess for FASD, which negatively impacted on access to services. Furthermore, standardised test versions quickly become outdated, affecting applicability and usability of the guidelines. After weighing the potential risks and benefits, The Guidelines Development Group decided against including a list of example tools.
- It is the responsibility of practitioners to operate within their area of expertise and seek clinical supervision when necessary. Standardised tests are just one piece of the information that clinicians can use, where appropriate, to inform diagnostic decision-making. However, tests do not diagnose; clinicians do. There are no standardised tests designed to specifically detect FASD. Clinicians must select the tests they use based on a wide variety of factors. The guidelines recommend that clinicians seek clinical supervision if they do not feel they have the appropriate knowledge to make these decisions.

Good Practice Statement 32

It is important to consider the neurodevelopmental challenges in the context of environmental factors. Interpreting assessment results requires a holistic approach, including considering how valid measures are for different groups of people, and the range of prenatal and postnatal factors that can influence outcomes.

- This good practice statement has been highlighted as this is a key consideration in the neurodevelopmental assessment process. Concerns were raised by Clinical Advisory Group members that assessments were being conducted in a ‘tick box’ manner. To address this, this statement, along with other detailed information and a range of practitioner templates, is provided to support practitioners in adopting a more holistic approach to diagnostic decision making.

Good Practice Statement 34

Assessment will naturally vary based on the availability of resources. Where multi-disciplinary services are not available or cannot be accessed, engagement with other services through a shared-care approach is suggested to support accessibility to assessment and diagnostic services.

- This good practice statement has been included to emphasise the need for assessments to be responsive to varying resource levels, facilitating equitable access to services. Alongside the proposed assessment process (Figure 1), these guidelines aim to empower all practitioners to incorporate the assessment and diagnosis of FASD into their routine practice. This strategy is intended to overcome current barriers to diagnosis and ensure more consistent and accessible care.

- While this is no substitute for well-funded health services, it is imperative to secure additional funding to ensure that every Australian with PAE/FASD receives the best possible care, regardless of their geographic location. This should include increased rebates for the complex neurodevelopmental assessment MBS items to appropriately support the provision of assessment and diagnosis of FASD in private practice settings.

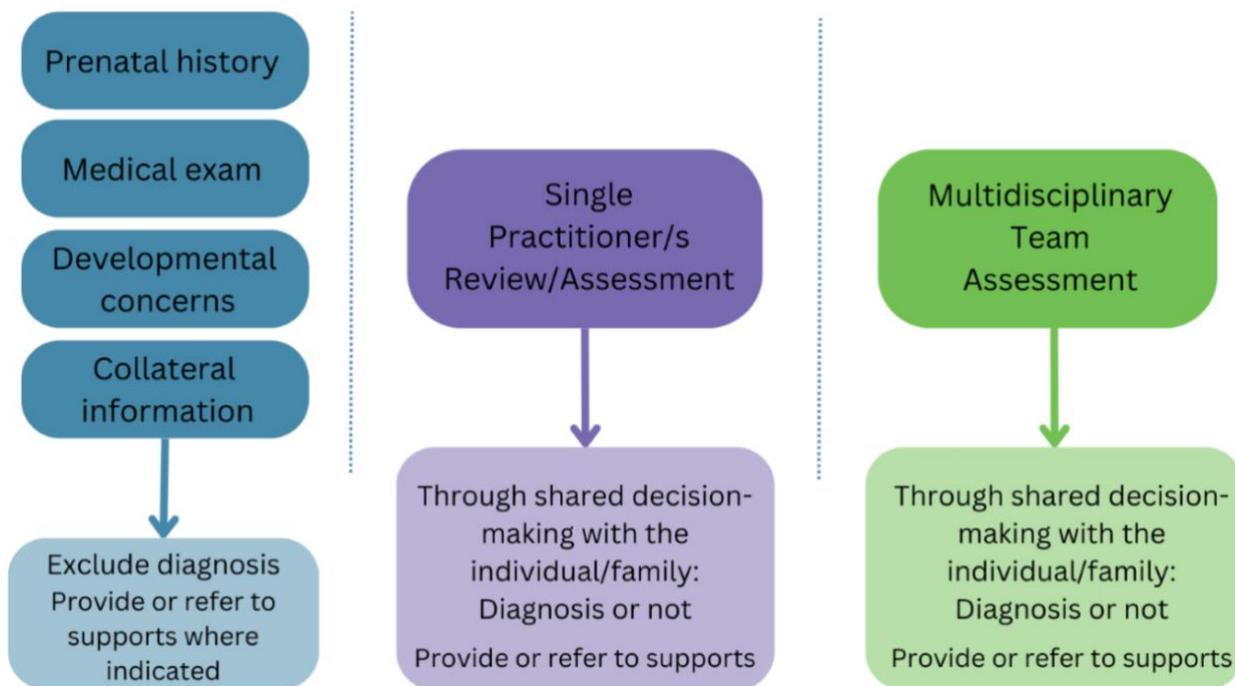


Figure 1. Overview of the assessment

3.2 Summary of implementation considerations, tools and tips

To support implementation of the recommendations a range of implementation considerations, tools and tips are provided in the guidelines and have also been summarised here.

Implementation Consideration, Tool, and Tip 1

Practitioners can integrate the International Classification of Functioning, Disability, and Health (ICF) into their assessments. The background history taking, and case formulation templates provided in [Appendix D](#) include some of the relevant ICF areas.

Implementation Consideration, Tool, and Tip 2

Practitioners are encouraged to use shared decision making. See [Shared decision making: an overview](#) for further general information.

'Finding your way' is a shared decision-making resource created with, and for, Aboriginal and Torres Strait Islander people through the NSW Agency for Clinical Innovation. Learn more about the model here: <https://aci.health.nsw.gov.au/shared-decision-making>, in the [assessment process section](#) of this document, and in the FASD Indigenous Framework ([hyperlink to be inserted once available online](#)).

Implementation Consideration, Tool, and Tip 3

Culturally responsive care is different for every individual and family. Practitioners should not make assumptions about the type of care a person would prefer because they are Aboriginal, Torres Strait Islander, or culturally and linguistically diverse.

"There are many Aboriginal families that are comfortable to use western biomedical systems and in fact, work really well and engage best that way. And then we have families that definitely do not, and they need more cultural supports and safety. It's all on a spectrum" (Aboriginal Health Practitioner).

See the Australian Indigenous FASD Framework ([hyperlink to be inserted once available online](#)) for detailed suggestions regarding how practitioners can reflect and adjust their practice to provide culturally responsive assessments.

Implementation Consideration, Tool, and Tip 4

For individuals and families where English is a second/additional language, it is a requirement of The National Safety and Quality Health Service Standards that interpreting services are available where appropriate.

<https://www.safetyandquality.gov.au/standards/nsqhs-standards>

Implementation Consideration, Tool, and Tip 5

Assessment and diagnosis of FASD can be undertaken using the MBS items for complex neurodevelopmental disorders, introduced 1 March 2023. For more details see

<https://www.servicesaustralia.gov.au/medicare-items-for-complex-neurodevelopmental-disorders-and-eligible-disabilities>

Implementation Consideration, Tool, and Tip 6

In line with the FASD Indigenous Framework (*hyperlink to be inserted once available online*), the informed consent and assent process needs to provide information in a way that can be meaningfully understood. It is also critical that the person and/or family feels comfortable and safe during this process. This requires respectful communication that is two-way and avoids using medical jargon.

Two-way communication involves listening with genuine respect and interest to what another person shares, verbally and nonverbally, to increase understanding and share meaningfully. Two-way communication is an exchange where participants are equally valued.

To support a culturally comfortable and safe environment, practitioners can incorporate information and visual resources to explain:

- what the referral and/or assessment is for
- what the assessment process generally involves
- what the potential outcomes and follow-up from the assessment may involve
- the potential benefits and risks.

Where appropriate, this may include the use of other languages, and support from an interpreter or cultural consultant. The informed consent process should be inclusive of appropriate family/support people (i.e., recognising everyone's unique kinship and familial system), with the goal of ensuring that all people involved have genuine control over decisions about their healthcare. This can only be achieved if the person and their family have been supported to make an informed choice about whether an assessment is something they want to undertake.

Implementation Consideration, Tool, and Tip 7

Different approaches to informed consent and assent may be required depending on the assessment context. For example, where the referral question is about assessing the possibility of FASD, informed consent and assent specific to FASD should be obtained at the outset. In circumstances where information about PAE emerges later in the assessment process (i.e., is not the basis of the referral), obtaining additional informed consent and assent related to FASD assessment is warranted.

Implementation Consideration, Tool, and Tip 8

To support early identification of prenatal factors that can influence developmental outcomes, information that could affect longer-term health outcomes for children be transferred from the pregnancy record to the child's health record. This information should be kept to the minimum required to support the wellbeing of the child and no personal or identifying information on the parents should be included.

The Advisory Groups reported that transfer of information from the pregnancy record is occurring systematically in Western Australia, through the Midwives Notification System (Mutch et al., 2015)

https://ww2.health.wa.gov.au/Articles/J_M/Midwives-Notification-System, and in Victoria, where information from the Birthing Outcomes system is automatically copied from the maternal discharge to the newborn discharge.

Implementation Consideration, Tool, and Tip 9

During the guideline development process, a procedure was also established in Queensland to support the automatic transfer of a minimum amount of prenatal information through the integrated Electronic Medical Record.

Prenatal alcohol exposure can adversely impact people across all groups in our society. Members of the Advisory Groups noted that it is important for people to be aware that PAE is *“everyone’s business and everyone’s responsibility.”*

Practitioners need to be mindful of bias in the referral and assessment process and be careful not to make assumptions about the likelihood of prenatal alcohol exposure or FASD based on an individual’s sociodemographic features.

Members of the Living Experience Advisory Group described experiences where they were not asked about prenatal alcohol exposure due to practitioners assuming they *“knew not to drink”* based on their sociodemographic features.

Members of the Clinical Advisory Group reported concerns regarding inappropriate referrals for assessments that were based on an individual’s sociodemographic background, rather than accurate information being collected about prenatal alcohol exposure.

Implementation Consideration, Tool, and Tip 10

A practitioner resource in [Appendix D](#) provides an overview of the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) tool structured to collect information on alcohol consumption pre- and post-pregnancy recognition.

Implementation Consideration, Tool, and Tip 11

Some states/territories have, or are establishing, electronic referral systems (e.g., between primary and tertiary health services). These systems are designed to provide practitioners with up-to-date evidence-based assessment, management, and referral information in an easy to access web format. Where these electronic referral systems are available, information regarding FASD is sometimes included (as reported by the Advisory Groups). Where available, we suggest that information about FASD and local services can be uploaded to Health Pathways or other available electronic referral systems to support provision of information to primary health care professionals and facilitate streamlined assessment processes.

Implementation Consideration, Tool, and Tip 12

Challenges with gathering prenatal history for children in out-of-home care were discussed as a major barrier to assessment across Advisory Groups. To support collection of accurate prenatal alcohol exposure information the following implementation considerations are noted:

- Information about prenatal alcohol exposure should be documented alongside other relevant prenatal factors (e.g., other drug exposures, domestic violence, family medical history).
- As part of training resources for child protection staff, include information on how to collect and document information accurately on prenatal alcohol exposure, as well as local referral pathways.
- Prenatal alcohol exposure is not a reason for a child to be placed into out-of-home care. There can be many reasons why prenatal alcohol exposure occurs, including exposure that occurred before an individual knew they were pregnant, pre-existing alcohol use disorder or drinking to cope with domestic violence, or other traumatic circumstances. Pregnant individuals need to feel safe to discuss their concerns and to seek help for themselves and their children, without the fear of their children being removed.
- Information about assessment, diagnosis, and recommendations should be incorporated into a child’s health management plan and this information be provided to foster and kinship carers.

Implementation Consideration, Tool, and Tip 13

Challenges with collecting prenatal history were also noted in the Advisory Groups for individuals involved with the justice system, including collecting this information through court-ordered assessments within restricted timeframes.

Notably, the United Nations Convention on the Rights of the Child (UNCRC) General Comment No. 24 states: *“Children with developmental delays or neurodevelopmental disorders or disabilities (for example, autism spectrum disorder, fetal alcohol spectrum disorders, or acquired brain injuries) should not be in the child justice system at all, even if they have reached the minimum age of criminal responsibility. If not automatically excluded, such children should be individually assessed.”* While the UNCRC comment concerns children, this should also be considered in the context of adult justice.

It is also important to acknowledge that irrespective of age, and disability type, people with disabilities are proportionally over-represented in the criminal justice system as offenders and victims, and often reach this status and experience greater negative consequences due to inherent structural biases within those systems and the underpinning frameworks (Baidawi et al., 2022).

To facilitate collection of accurate prenatal alcohol exposure information in these contexts, and the provision of appropriate supports, the following implementation considerations are noted:

- Where appropriate, collect and document information about prenatal alcohol exposure alongside other relevant prenatal (e.g., other illicit substance exposure, domestic violence, family medical history) and postnatal factors, and use this to inform referrals to appropriate assessment providers.
- Provide information and training about accurate collection and documentation of prenatal alcohol exposure and local referral pathways to all professionals in legal and justice contexts.
- Where consent/assent is provided, information about plans for assessment, assessment/diagnostic outcomes, and support planning, should be documented on an individual’s police and justice records to help inform approaches to support.

Consider non-custodial therapeutic diversionary options where possible, including appropriate place-based culturally responsive programs for individuals identified with impairments and neurodevelopmental conditions, including FASD

Implementation Consideration, Tool, and Tip 14

More information about the University of Washington Lip-Philtrum Guides is available from their website, including instructions regarding how to order the electronic versions: <https://depts.washington.edu/fasdpn/htmls/lip-philtrum-guides.htm>

Implementation Consideration, Tool, and Tip 15

A palpebral fissure norm calculator can be accessed from the University of Washington website: <https://depts.washington.edu/fasdpn/htmls/diagnostic-tools.htm>

Implementation Consideration, Tool, and Tip 16

[Appendix D](#) provides an example history taking template that includes prenatal, developmental, behavioural, functional, wellbeing and participation domains that could be adapted to suit different clinical contexts.

Implementation Consideration, Tool, and Tip 17

[Appendix D](#) provides a holistic profile and diagnostic formulation template that can be adapted to suit different clinical contexts.

**Implementation
Consideration, Tool,
and Tip 18**

[Appendix E](#) provides information regarding and example resources to support collaborative goal setting, which can be used to develop tailored recommendations.

3.3 Capacity building to support implementation

The support practitioners in making assessment and diagnosis of FASD part of routine practice, capacity building will be required for a wide range services and disciplines, including across rural and remote areas.

Specifically, this should include:

- Targeted implementation resources for different health disciplines. These resources could be developed in partnership with all the relevant professional associations.
- Targeted implementation resources for different health settings (e.g., primary health care including Aboriginal and Torres Strait Islander Health Services, private practitioners, multi-disciplinary team settings).
- Targeted implementation resources for different sectors (e.g., child protection, mental health, justice, education).
- Professional development programs, aligned with Australian Health Practitioner continuing professional development requirements, developed in partnership with relevant professional associations and peak bodies to support practitioners in upskilling and implementing the guidelines.
- Integration of these guidelines into clinical training through all Australian universities and medical colleges.
- Consideration by the HumanAbility Jobs and Skills Council for the development of an FASD Unit of Competency in the VET health training package to upskill Aboriginal health Workers, Practitioners, and enrolled nurses.

The Guidelines Development Group would like to thank NACCHO, RACGP, and the APS for their contributions through the public consultation in informing these suggestions to support capacity building.

4. Monitoring, evaluation and updating of the clinical practice guidelines.

The following suggestions are provided to support national monitoring, evaluation, and future updates of the clinical practice guidelines.

4.1 Monitoring and evaluation

Practitioners are encouraged to report diagnosed cases of FASD for children aged up to 16 years to the Australian FASD Registry. This will support monitoring of the application of the diagnostic criteria contained in the clinical practice guidelines for people within this age group.

Establishing a common data set is central to developing a comprehensive understanding of a conditions. As such, clinics are recommended implement the REDCap database template provided as an associated resource to collect all clinical assessment data (i.e., including data for all individuals attending for assessment, regardless of diagnostic outcome and age) to help monitor and evaluate application of the diagnostic criteria and actionable statements. A Clinical Database Working Group has been established to continuously improve the consistent data collection processes, and any interested practitioners are welcome to join.

4.2 Clinician Guideline Determinants Questionnaire – baseline assessment results

The Clinician Guideline Determinants Questionnaire (Gagliardi et al., 2019) was completed during the guideline development process to understand use of the current FASD Guide and is planned to be repeated 24 months post-dissemination of the new guidelines to evaluate impact. Appendix A provides a summary of the determinants included in the questionnaire.

Participants: Australian health practitioners were invited to complete the questionnaire. Practitioners were recruited via the Project Advisory Groups, relevant Australian professional associations, The FASD Clinical Network, The FASD Hub, NOFASD Australia, and relevant clinician Facebook groups.

Procedure: Ethical clearance was granted by the Children’s Health Research Ethics Committee (HREC/20CHQ69561). Data were collected and managed using REDCap. Initial contact was made via email, which included a brief description of the study and a link to the REDCap survey. Participants were provided the option to be contacted to receive a copy of the revised Australian Guide and to re-complete the survey following the dissemination of the revised guidelines.

Analysis of baseline data: Quantitative data were summarised descriptively, responses reported as frequencies and percentages. Content analysis was used to analyse responses from the open-ended questions exploring additional enablers and barriers to use of the guidelines and learning styles.

Summary of baseline data to be included once survey is completed: A total of 333 survey sessions were initiated. Of these, 232 (70%) provided consent and 136 (41%) completed the survey. A further 11 participants partially completed the survey. Most participants ($n = 111$, 76%) identified as female, and were in their mid-career stage ($n = 81$, 55%). Most respondents were paediatricians ($n = 54$, 37%) or psychologists ($n = 49$, 33%), working across public and private sectors (Table 1).

Survey respondents consider FASD as a possible diagnosis in their clinical assessments on a weekly ($n = 53$, 35%) or monthly ($n = 52$, 35%) basis (Table 3). Most participants ($n = 81$, 55%) regularly use the guide. Only a small number of participants ($n = 9$, 6%) were not aware of the current FASD Guide prior to this survey. A total of 143 participants responded to the Likert section of the survey (Figure 2). Only 42% of respondents agreed ($n = 41$, 29%) or strongly agreed ($n = 18$, 13%) with the contents of the Australian Guide to the Diagnosis of FASD. Most participants felt that they had the general knowledge, had been trained in the skills needed, and were confident in using the guidelines.

Interestingly, most participants ($n = 95$, 34.7%) would prefer to learn about guidelines through conferences, followed by peer reviewed publications ($n = 63$, 22.9%), viewing guidelines online ($n = 57$, 20.8%) and receiving an email about the guidelines ($n = 44$, 16.1%). In terms of sources practitioners reported currently consulting to inform clinical decision-making, colleagues were the most common source of information ($n = 117$, 16.9%), followed by literature ($n = 105$, 15.2%), FASD Guide ($n = 104$, 15.1%) and conferences ($n = 77$, 11.2%). Regarding the format practitioners would like to be able to access guidelines, the preferred format was having software to support implementation of the guidelines ($n = 78$, 33.2%), accessing online ($n = 73$, 31%), print ($n = 46$, 19.6%) and via an App ($n = 35$, 14.9%). Table 4 and 5 provide an overview of the free text responses summarising key enablers and barriers to use of the guide.

Table 2. Summary of participant demographics

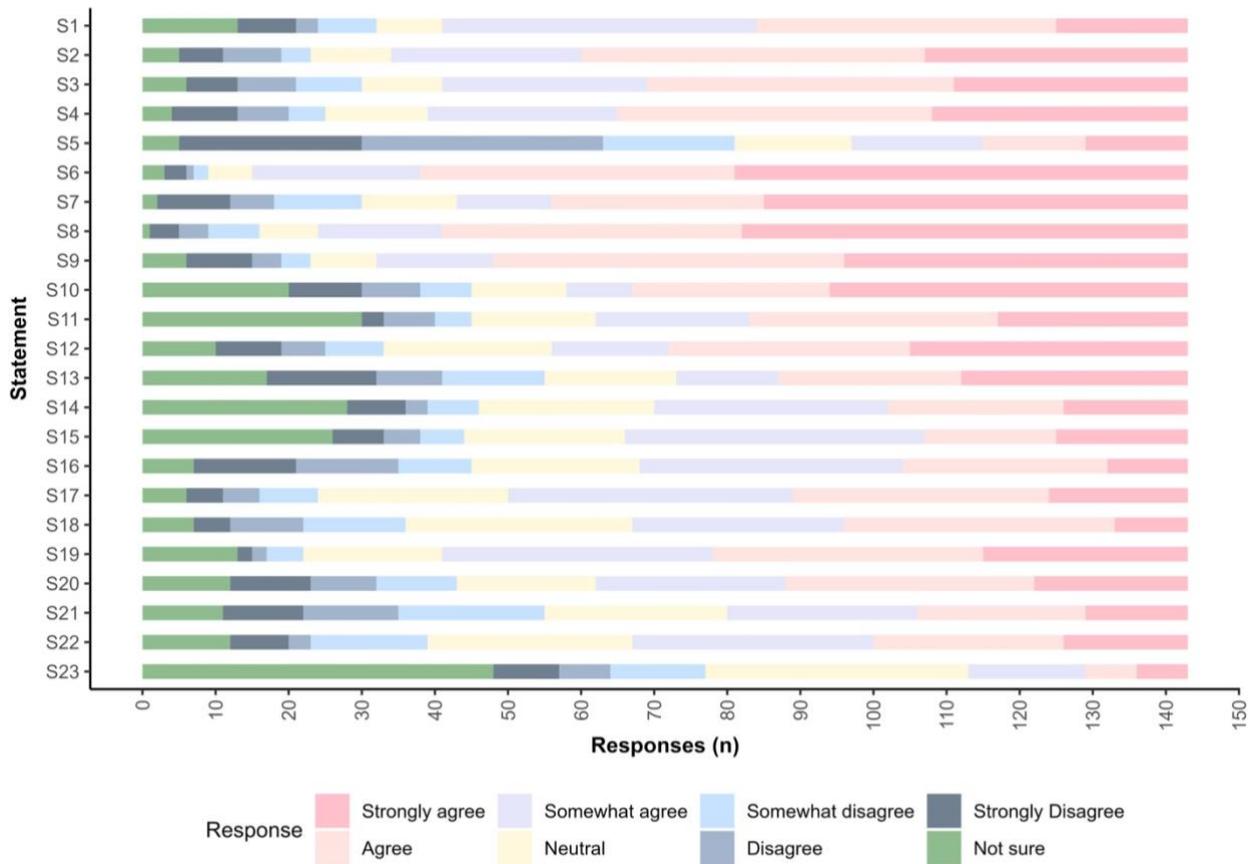
Characteristic	(n)	Participants
		(%)
Gender		
Female	111	76
Male	36	24
Age		
25-40 years	46	31
40-55 years	60	41
Above 55 years	41	28
Career Stage		
Early	26	18
Mid	81	55
Late	40	27
Professional Setting*		
Public	89	N/A
Private	62	N/A
Other	28	N/A
Profession		
Paediatrician	54	37
Psychologist	49	33
Occupational Therapist	10	7
Speech and Language Pathologist	10	7
Other [†]	24	16
Participant location		
Australian Capital Territory	5	3
New South Wales	28	19
Northern Territory	13	9
Queensland	47	32
South Australia	13	9
Tasmania	1	1
Victoria	16	11
Western Australia	24	16

*Participants were able to select across multiple settings to reflect work practices

[†]Other professions include Clinical Geneticist, General Practitioner, Mental Health Worker, Nurse, Nurse practitioner, Physiotherapist, Psychiatrist, Social Worker, and 'Other'.

Table 3. Summary of participant awareness and use of current FASD Guide

	Participants	
	(n)	(%)
Frequency considering FASD as diagnosis		
Not currently	15	10
Not started yet	3	2
Daily	3	2
Monthly	52	35
Weekly	53	36
Yearly	20	14
Awareness of the guide		
I was not aware prior to this questionnaire	9	6
I have read all or some of the guideline on one occasion then never again	16	11
I have read all or some of the guideline on multiple occasions	116	79
Other	6	4
Use of the guide		
I have never used the guideline and do not plan to	7	5
I have never used the guideline, but will consider using it	9	6
I have never used the guideline, but will use it now	5	3
I have used the guideline a few times	36	24
I have used the guideline once only	7	5
I regularly use the guideline	81	55
Other	2	1

Figure 2. Overview of clinician determinants of guideline use

Statement 1: I agree with the content of the Australian Guide to the Diagnosis of FASD

Statement 2: Following the Australian Guide to the Diagnosis of FASD will improve care delivery

Statement 3: Following the Australian Guide to the Diagnosis of FASD will improve patient outcomes

Statement 4: Following the Australian Guide to the Diagnosis of FASD brings advantages to me, my practice or organization, and or my patients (i.e., supports communication and decision-making, etc.)

Statement 5: Following the Australian Guide to the Diagnosis of FASD brings disadvantages to me, my practice or organization and or my patients (i.e., time, costs, etc.)

Statement 6: I possess the general knowledge about FASD that is needed to use in the Australian Guide to the Diagnosis of FASD

Statement 7: I was trained in the skills (i.e., technical, procedural, cognitive, etc.) needed to use the Australian Guide to the Diagnosis of FASD

Statement 8: I am confident that I possess the skills (i.e., technical, procedural, cognitive, problem-solving, etc.) needed to use the Australian Guide to the Diagnosis of FASD

Statement 9: It is among my self-acknowledged professional responsibilities to follow the procedures, actions or activities recommended in the Australian Guide to the Diagnosis of FASD

Statement 10: Colleagues in my own organization use the Australian Guide to the Diagnosis of FASD

Statement 11: Colleagues outside of my organization use the Australian Guide to the Diagnosis of FASD

Statement 12: I have the autonomy to make changes needed to follow the Australian Guide to the Diagnosis of FASD

Statement 13: My organization provides support (leadership, resources, assistance, etc.) needed to use the Australian Guide to the Diagnosis of FASD

Statement 14: The recommendations in the Australian Guide to the Diagnosis of FASD are consistent with my patients' values and preferences

Statement 15: My patients do, or are likely to accept and follow the recommendations in the Australian Guide to the Diagnosis of FASD

Statement 16: The procedures, actions or activities recommended in the Australian Guide to the Diagnosis of FASD are easy to incorporate in my practice

Statement 17: It is easy to find information in the Australian Guide to the Diagnosis of FASD because the format and layout are easy to navigate

Statement 18: The wording of the recommendations is clear and unambiguous

Statement 19: The Australian Guide to the Diagnosis of FASD includes or is accompanied by implementation tools (clinician summary, patient summary, algorithm, medical record forms, etc.)

Statement 20: Implementation tools included in or with the Australian Guide to the Diagnosis of FASD (clinician summary, patient summary, algorithm, chart forms, etc.) are helpful to me, my practice or organization, and or my patients

Statement 21: The Australian Guide to the Diagnosis of FASD clearly describes underlying evidence supporting the recommendations

Statement 22: The Australian Guide to the Diagnosis of FASD is consistent with the available evidence

Statement 23: The Australian Guide to the Diagnosis of FASD describes whether patient preferences were collected and influenced the guideline questions, methods or recommendations

Table 4. Summary of key enablers to use of the Australian FASD Guide

Content area	Example quotes	Frequency (%)
Clear specific guidance, easy to follow, user friendly	"The clear requirements/framework for diagnosis" "It's simple to follow and gives clear guidance"	45 (36.3)
Easy to access/accessibility/free online access	"Having the guidelines available electronically and therefore easy to access." "Ease of access."	18 (14.5)
Having the required knowledge/skills/ familiarity of the guide	"I have the knowledge, training and skills to use the guide effectively in my role." "Working knowledge of the guidelines."	14 (11.3)
Organisation structure/support to use the guide	"My organisation supports the clinical use of the FASD guide." "The organisation/workplace."	12 (9.7)
Training	"I was trained in the skills needed to use it." "Access to training."	10 (8.1)
Implementation/clinical tools	"Clinical tools that provide precise details." "Use of tools for diagnosis."	8 (6.5)
Professional expectations to use the guide	"The guidelines are current best practice. Therefore, we have an obligation to use them which is incontestable." "I am required to use the guide."	7 (5.6)
The guide being evidence-based	"The Guide is consistent with the available evidence." "Evidence-based overall."	6 (4.8)
Awareness/existence of the guide	"I was unaware of this resource previously. Awareness of the resource..." "The pure fact that there is a diagnostic guide."	4 (3.2)
Belief that use of the guide will improve care	"Following the Australian Guide will improve care delivery."	3 (2.4)
Having a nationally consistent/standardised approach to diagnosis	"Provides a consistent national guideline." "Consistent assessment process that is standardised and evidence-based."	3 (2.4)
Other colleagues using the guide	"Colleagues outside my organisation use the Guide." "Whether the guidelines are used in practice by colleagues."	2 (1.6)

Note. 124 valid responses used as the denominator. Some responses were coded for multiple content areas. Survey question: *What is the single most important factor noted above that enables your use of the Australian Guide to the Diagnosis of FASD?*

Table 5. Summary of key barriers to use of the Australian FASD Guide

Content area	Example quotes	Frequency (%)
Time/cost/complexity/access to clinicians/resources	“Limited resources, skill base and wide range of skills assessed in children within the guide.” “Difficulties in administration due to time required for assessments.”	25 (24.8)
Not being evidence-based/evidence needs updating	“The evidence base for the guideline.” “The construct of FASD as described in the Guide lacks validity and rests on a number of assumptions that are individually and cumulatively not consistent with available evidence...”	16 (15.8)
Lack of familiarisation/capability /skills	“Familiarity with the Guide.” “My technical capability to use the guidelines in my particular practice setting.”	8 (7.9)
Lack of specificity/Inter-relatedness of neurodevelopmental domains and cross over with other conditions	“The current iteration of these guidelines is far too broad and does not take into account that patients may have an underlying genetic diagnosis which overlaps with FASD or co-exists with it...” “The use of comorbid conditions as an indicator of severe impairment remains a significant problem.”	8 (7.9)
Ambiguity of recommendations	“Much of the wording is ambiguous with a lack of evidence base to justify the suggested approaches.” “The slightly ambiguous messaging around low levels of alcohol consumption.”	5 (5)
Ambiguity regarding what is included in the neurodevelopmental domains/assessment approaches	“Some of the impairments are not concrete.” “Ambiguity in what can and can’t be included in the 10 domains.”	5 (5)
Not being culturally appropriate	“Culturally sensitive practice/implementation.” “Reliance on Western normed tests as evidence of FASD for socially disadvantaged people and their children and this is not how Aboriginal people approach disability or cognitive impairment.”	5 (5)
Does not consider patient preferences/lived experiences	“Patient preferences.” “Patient input and preferences are often not considered by the guidelines.”	4 (4)
Lack of flexibility in the guide	“Autonomy to make changes.” “Lack of flexibility in the guideline.”	3 (3)
Lack of access to historical records/PAE information	“Getting reports from others.” “Historical records can be difficult to access...”	3 (3)
Lack of flexibility with neurodevelopmental domains cut offs	“Domain cut off scores.” “More flexibility in enabling FAS to be called on children with not sufficient Rank 3 but lots of Rank 2s on the background of PAE.”	3 (3)
Implementation/clinical tools not being user friendly	“Some of the forms are not user friendly.” “Clinician summary form is very long, not always very clinically relevant and doesn’t have places for paediatric assessment information and data that are integrated with patient file data, so causes double entry of data.”	2 (2)
‘Spectrum of FASD’ not being included/exclusion of	“Exclusion of children with mild-moderate impairments from diagnosis and thus recognition by support systems.”	2 (2)

children with moderate/mild impairments	"Spectrum recognition and inclusion."	
Lack of organisation support	"Lack of understanding of FASD by management." "Organisational support for complexity of assessment."	2 (2)
Not believing in FASD diagnosis/FASD diagnosis is not helpful	"Ultimately giving these kids a label of FASD does nothing practical to help them." "I won't use them [the guide], I won't diagnose it [FASD]. I will refer if people want it, but this would be in my opinion immoral."	2 (2)
Diagnosis based on facial features without confirmed PAE	"The specific issue I have is the concept that it is possible to diagnose FASD in the absence of a history of alcohol exposure during pregnancy, on the basis of nonspecific features that overlap with numerous other conditions..." "...As the guidelines stand a patient could have global developmental delay and a couple of non-specific facial features to achieve a FASD diagnosis but have an alternative genetic explanation for these."	2 (2)
Document length/challenges with navigating	"The length of the document." "It's very long and hard to navigate in a hurry, particularly section B."	2 (2)
'Check-list' based approach to diagnosis	"It is over-employed in a check-list fashion in a range of settings and this reduces the actual comprehensive formulation that should occur by some clinicians..."	1 (0.9)
Strict adherence may impact on person centred care	"Sometimes following the Guide strictly can highlight certain disadvantages within the role/organisation and when considering person-centred care and patient outcomes."	1 (0.9)
Health professionals not considering FASD	"Paediatricians etc. not considering FASD and refusing to review for FASD."	1 (0.9)
Lack of community awareness of FASD	"Lack of recognition in community/referring partners therefore minimal referrals."	1 (0.9)
Not including sensory processing	"Families recognise sensory processing challenges impacting on their child's participation which are currently not considered in the diagnostic guide."	1 (0.9)
Terminology of FASD	"The name fetal alcohol spectrum disorder."	1 (0.9)

Note. 101 valid responses used as the denominator. Some responses were coded for multiple content areas. Survey question: *What is the single most important factor noted above that does/will challenge your use of the Australian Guide to the Diagnosis of FASD?*

4.3 Strategies to address identified barriers to use of the current FASD Guide

Table 6. Review of identified barriers and strategies to overcome these barriers in the new FASD Guidelines

Barrier	Strategies
Time/cost/complexity/access to clinicians/resources	<ul style="list-style-type: none"> Proposed a more flexible assessment process that can be implemented across different contexts to support accessibility and better use of available resources. Developed Good Practice Statements that communicate that the assessment process will vary based on resources available including, for example that it may not be possible to assess all neurodevelopmental domains, which is the most time-consuming part of the assessment.
Not being evidence-based/evidence needs updating	<ul style="list-style-type: none"> Extensive work has been undertaken to review all the available evidence and develop guidelines that are evidence-based.
Lack of familiarisation/capability /skills	<ul style="list-style-type: none"> Pending funding availability – planning a series of practical face-to-face and online workshops, development of targeted implementation resources for different disciplines and help increase familiarity and build capability and skills of clinicians. Section 3.3 above provides more specific details regarding capability strategies that would be helpful to implement – pending further funding.
Lack of specificity/Inter-relatedness of neurodevelopmental domains and cross over with other conditions	<ul style="list-style-type: none"> Additional information is provided in the diagnostic criteria (Criterion E) to improve consideration of other conditions and exposures in the assessment process. Review of the neurodevelopmental domains has occurred, several areas are no longer included – based on available evidence (i.e., social cognition, social communication /pragmatics, motor speech impairments, speech-sound impairments) Comorbid conditions have been removed from the neurodevelopmental domains. Extensive information through the assessment considerations and Good Practice Statements is provided regarding the inter-relatedness of the neurodevelopmental domains and cross over with other conditions.
Ambiguity of recommendations	<ul style="list-style-type: none"> A clear structure has been applied for the recommendations with links to the evidence-based to justify the suggested approaches.
Ambiguity regarding what is included in the neurodevelopmental domains/assessment approaches	<ul style="list-style-type: none"> Review of the neurodevelopmental domains has been undertaken and detailed information is provided regarding ‘assessment considerations’ to support implementation. Detailed information is provided regarding assessment approaches in the diagnostic criteria and additional information section following the diagnostic criteria.
Not being culturally appropriate	<ul style="list-style-type: none"> Significant work has been undertaken to improve the cultural responsiveness of the guidelines. Flexibility is incorporated into the diagnostic criteria and associated information to improve assessment practices for culturally and linguistically diverse and socially disadvantaged people in Australia.

	<ul style="list-style-type: none"> Information is embedded throughout the main guidelines document that was developed by a Cultural Advisory Group and an additional Indigenous FASD Framework document is also provided that goes into more detail to improve assessment and diagnostic approaches for First Nations Australians.
Does not consider patient preferences/lived experiences	<ul style="list-style-type: none"> Developed a novel type of actionable statement 'Lived Experience Statements' and included these throughout the document where appropriate. Gathered input from people with living experience through multiple different mechanisms and have embedded this information throughout the document where relevant. Pending further funding – The Guidelines Development Group would like to be able to develop associated companion documents for consumers (e.g., parent/caregiver resources, resources for young people and adults with FASD).
Lack of flexibility in the guide	<ul style="list-style-type: none"> The Guidelines Development Group have worked hard to balance wording of the criteria and content to provide direction for clinicians, but also to allow flexibility and shared decision making to ensure person-centred assessment approaches.
Lack of access to historical records/PAE information	<ul style="list-style-type: none"> A number of implementation considerations are provided in the PAE assessment section to support improvements in information collection and record keeping across different settings (e.g., health, child protection and justice). The assessment processes aims to be inclusive of practitioners across a range of settings and encourages people to collect and document PAE. A practitioner template and resource is provided regarding assessment of PAE. Pending further funding the Guidelines Development Group would like to be able to develop a range of associated resources to improve practices in this area.
Lack of flexibility with neurodevelopmental domains cut offs	<ul style="list-style-type: none"> Extensive additional information is provided regarding the process for determining clinical significance of neurodevelopmental impairments. A percentile range is provided to support interpretation of standardised tests for the purposes of diagnostic decision making, although extensive information is also provided to encourage clinicians to not be relying solely on standardised tests in making these determinations.
Implementation/clinical tools not being user friendly	<ul style="list-style-type: none"> Clinician forms have been revised. A database template is also being developed that will provide an assessment summary which can also be used for clinical purposes (i.e., to help reduce double data entry).
'Spectrum of FASD' not being included/exclusion of children with moderate/mild impairments	<ul style="list-style-type: none"> Changes have been made to the diagnostic criteria to better describe an individual's presentation that would be eligible for diagnosis, this may not capture all of the individuals described by this point, but does include consideration of functional impacts of the impairments.
Lack of organisation support	<ul style="list-style-type: none"> This could be considered in future dissemination and implementation strategies e.g. targeting dissemination of information to organisations and to people in management positions to

	<p>communicate about the new guidelines. Pending further funding specific organisational based resources could be developed that provided organisational level considerations rather than only resources targeted at individual practitioners.</p>
Not believing in FASD diagnosis/FASD diagnosis is not helpful	<ul style="list-style-type: none"> • Quotes from people with living experience of FASD have been included throughout the document to highlight people's experiences, including potential benefits of receiving a diagnosis. • Pending further funding The Guidelines Development Group would like to develop other resources from the perspective of people with living experience to provide further information about experiences and benefits of receiving a diagnosis of FASD.
Diagnosis based on facial features without confirmed PAE	<ul style="list-style-type: none"> • Additional information has been added throughout the diagnostic criteria and associated information to communicate the importance of excluding other better explanations for an individual's presentation. • A range of good practice statements are also included that address the importance of genetic testing and completion of other relevant medical testing to rule out other conditions. • A diagnostic formulation template is provided and a number of good practice statements about formulation to encourage practitioners to undertake a more considered approach to formulation, including consideration of differential diagnoses.
Document length/challenges with navigating	<ul style="list-style-type: none"> • The document will be provided online with all sections separated so practitioners can access single sections of the document as required. • A short version of the document will also be provided, with hyperlinks to the long version of the document to support navigation.
'Check-list' based approach to diagnosis	<ul style="list-style-type: none"> • Extensive information is provided in the new guidelines that aims to dissuade practitioners from taking a 'check-list' approach to diagnosis (e.g., guidance regarding complexity of neurodevelopmental assessment, assessment principles, neurodevelopmental assessment considerations, detailed information regarding consideration of other causes and conditions in the diagnostic criteria and throughout the document, PAE risk assessment guidance, diagnostic formulation guidance and template).
Strict adherence may impact on person centred care	<ul style="list-style-type: none"> • The new guidelines have a strong focus on shared decision making and have utilised a range of strategies and specific language to facilitate person-centred approaches to assessment throughout the document.
Health professionals not considering FASD	<ul style="list-style-type: none"> • Plan for a wide dissemination strategy to provide information to all relevant health disciplines regarding the new guidelines. This has already commenced through invited presentations at health professional conferences and professional development opportunities for different disciplines and sectors.
Lack of community awareness of FASD	<ul style="list-style-type: none"> • Plan for wide dissemination strategy to cover traditional media outlets and community groups to share information about the new guidelines. • There will be a Plain English summary of the guidelines and pending further funding The Guidelines Development Group would like to be

	able to develop a range of other companion documents that could make the information more accessible to the general community to increase awareness of FASD.
Not including sensory processing	<ul style="list-style-type: none"> The evidence was reviewed regarding sensory processing and there was no evidence available that demonstrated a clear association between PAE and sensory processing outcomes at this stage. The guidelines recommend that sensory processing can be captured under 'other associated conditions' to document challenges that individuals are experiencing and provide tailored recommendations and supports as clinically indicated.
Terminology of FASD	<ul style="list-style-type: none"> There were discussions regarding this across the Advisory Groups and no consensus could be reached regarding diagnostic terminology, with some preferring terminology of FASD and others preferring terminology of ND-PAE or similar. For consistency and clarity we have used terminology of FASD throughout the document, but we have provided information regarding different terminologies and ultimately communicated that this should be the choice of the individual and family attending for assessment.

4.3 Updating

The Guidelines Development Group will consider a range of factors in determining the most appropriate timeframe for updating the guidelines. This will include feedback from end-users regarding the application of the diagnostic criteria and guidelines in clinical practice, new research findings in the field, and international criteria and guidelines. The Guidelines Development Group will seek further funding to support implementation and evaluation of the guidelines, the results of which would also be able to inform when updates to the guidelines are required.

Ideally, the Guidelines Development Group would like to explore the possibility of developing living guidelines. Living guidelines enable online, dynamically updating summaries of evidence to guide clinical practice and policy development. However, a sustainable funding model would be required to support this approach, such as annual funding to support regular updating of the guidelines.

5. References

Fischer F, Lange K, Klose K, Geiner W, Kraemer A (2016) Barriers and strategies to guideline implementation – A scoping review. *Healthcare* 4:36.

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Gagliardi AR, Brouwers MC, Palda VA, Lemieux-Charles L, Grimshaw JM (2011) How can we improve guideline use? A conceptual framework of implementability. *Implementation Science* 6: 26.

National Health and Medical Research Council (2020) *Procedures and requirements for meeting NHMRC standards for clinical practice guidelines*. Melbourne: National Health and Medical Research Council.

6. Appendices

Appendix Table 1. Clinician Guideline Determinants Questionnaire (Gagliardi et al., 2019).

Determinant	Question/Statement
SECTION 1. Background Information	
Demographic characteristics	Sex/gender
	Career stage
	Profession/Specialty/Subspecialty
	Country
Attitudes about guidelines	Guidelines (in general) optimize health care delivery and outcomes by supporting patient-clinician communication and decision-making
Experience with guidelines	I have participated in the development of one or more guidelines
SECTION 2. Determinants of Guideline Use	
Awareness and familiarity	What is your level of awareness of/familiarity with the <name> guideline: Choose the response that best matches your scenario
Intention and use	What is your intended or actual use of the <name> guideline: Choose the response that best matches your scenario
Agreement	I agree with the content of the <name> guideline
Expected outcome	Following the guideline will improve care delivery
	Following the guideline will improve patient outcomes
Personal benefits or drawbacks	Following the guideline brings advantageous to me, my practice or organization, of my patients (i.e., supports communication and decision-making, etc.)
	Following the guideline brings disadvantages to me, my practice or organization, or my patients (i.e., time, costs, etc.)
Knowledge	I possess general knowledge about the clinical condition that is needed to use this guideline
Skills	I was trained in the skills (i.e., technical, procedural, cognitive, etc.) needed to use this guideline
Self-efficacy in skills	I am confident that I possess the skills (i.e., technical, procedural, cognitive, problem-solving, etc.) needed to use this guideline
Professional obligation	It is among my self-acknowledged professional responsibilities to follow the procedures, actions or activities recommended in this guideline
Normative use by colleagues	Colleagues in my own organization use the guideline
	Colleagues outside of my organization use the guideline
Expectation of others	Others expect me to use the procedures, actions or activities recommended in this guideline:
Individual autonomy for change	I have the autonomy to make changes needed to follow this guideline
Organizational capacity for change	My organization provides support (leadership, resources, assistance, etc.) needed to use this guideline
Patient satisfaction	The recommendations in this guideline are consistent with my patients' values and preferences
Patient use of guidelines	My patients do, or are likely to accept and follow the recommendations in this guideline
Complexity of guideline	The procedures, actions or activities recommended in this guideline are easy to incorporate in my practice
Guideline format and organization	I can quickly find information in this guideline because the format and layout are easy to navigate
Clarity of recommendations	The wording of the recommendations is clear and unambiguous
Guideline tools	The guideline includes or is accompanied by implementation tools (clinician summary, patient summary, algorithm, medical record forms, etc.)
	Implementation tools included in or with the guideline (clinician summary, patient summary, algorithm, medical record forms, etc.) are helpful to me, my practice or organization, or my patients
Underlying evidence	The guideline clearly describes underlying evidence supporting the recommendations

	The guideline is consistent with the available evidence
Patient preferences	The guideline describes whether patient preferences were collected and influenced the guideline questions, methods or recommendations
SECTION 3. Other Determinants Not Already Mentioned	
Enablers	What is the single most important factor noted above that does/will enable your use of this guideline?
	What is the single most important factor NOT noted above that does/will enable your use of this guideline?
Barriers	What is the single most important factor that does/will challenge your use of this guideline?
	What is the single most important factor NOT mentioned above that does/will challenge your use of this guideline?
SECTION 4. Learning Style	
Information sources typically consulted	What sources do you most often consult for knowledge to guide clinical decision making?
Guideline dissemination preferences	How do you prefer to learn about guidelines?
Guideline delivery format preferences	What is your preferred format for guidelines, guideline summaries or guideline tools?

